

RENAL DIALYSIS TECHNOLOGY

PAPER-I

**APPLIED ANATOMY, PHYSIOLOGY & PHARMACOLOGY RELATED TO DIALYSIS
TECHNOLOGY**

Time: 3 Hours

Max Marks: 80

Note: Draw diagrams whenever necessary

Write an essay on any TWO of the following questions:

2 X 10 = 20

1. Draw the structure of a nephron and explain its functions.
2. Mention the nerve supply of the urinary bladder and the mechanism of micturition.
3. Mention the classification of diuretics, their uses and side effects.

Write a short note on any FIVE of the following:

5 X 6 = 30

4. Draw the Juxtaglomerular apparatus and mention its significance.
5. Mention counter- current exchange.
6. Define Glomerular Filtration Rate (GFR) and mention the factors affecting it.
7. Anatomy of the peritoneum and its physiology in peritoneal transport.
8. Mention veins & arteries involved in AVF creation and various sites of AVF.
9. Emergency drugs in dialysis unit.

Write briefly on the following:

10 X 3 = 30

10. Mention calcium channel blockers.
11. Mention a few differences between juxtamedullary nephrons and cortical nephrons.
12. Mention the uses of heparin and its dose in dialysis.
13. Mention the functions of the kidney.
14. What is UPCR and UACR?
15. Mention the normal size of human kidneys in males and females.
16. What are NSAID's? give a few examples and mention two side effects.
17. What are normal plasma values of serum electrolytes?
18. What is RFT and mention its normal values.
19. What is the Glomerular filtration barrier?
